UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte GREGORY D. OLSON

Appeal No. 2006-1979
Application No. 09/597,154

ON BRIEF

Before RUGGIERO, BARRY, and HOMERE, Administrative Patent Judges.

RUGGIERO, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal from the final rejection of claims 1-25, which are all of the claims pending in this application.

The claimed invention relates to a method and system for providing a digital signal transmission line with a reduced echo. The transmission line which establishes a connection between a carrier and a user terminal includes a bridgetap line. The echo reducing effect is provided by an adaptor connected to the bridgetap line, the adaptor having a capacitor connected in parallel with one of another capacitor and a diode.

Claim 1 is illustrative of the invention and reads as follows:

1. A digital signal line transmission system with reduced echo, comprising:

a communication line between a carrier and a user terminal;

a bridgetap line having a first end connected to said communication line;

an adaptor connected to said bridgetap line, the adaptor including a capacitor in parallel with one of another capacitor and a diode, said adaptor having a capacitance;

wherein said adaptor reduces the effect of echo from said bridgetap line on a rate of data transmission to said user terminal over said communication line.

The Examiner's Answer cites the following prior art references:[1]

Braun	4,348,669	Sep. 07, 1982
Martin	4,622,442	Nov. 11, 1986
Atkinson et al. (Atkinson)	5,093,856	Mar. 03, 1992
Charles et al. (Charles)	5,929,402	Jul. 27, 1999
Pett et al. (Pett '178)	6,240,178	May 29, 2001 (filed Nov. 30, 1998)
Pett (Pett '181)	6,314,181	Nov. 06, 2001 (filed Feb. 28, 2000)
Schmidt et al. (Schmidt)	6,389,109	May 14, 2002 (filed Sep. 30, 1999)

[1] The Braun, Pett '181, and National Instruments references are cited as evidentiary documents in support of the rejection but are not part of the stated grounds of rejection.

National Instruments web site (National Instruments), "Impedance and Impedance Matching," http://zone.ni.com, three unnumbered pages, viewed March 30, 2005.

Claims 1-25, all of the appealed claims, stand finally rejected under 35 U.S.C. § 103(a). As evidence of obviousness, the Examiner offers Pett '178 in view of Atkinson with respect to claims 1-4, 6-10, 13, 22, and 23, adds Schmidt to the basic combination with respect to claims 5, 24, and 25, adds Martin to the basic combination with respect to claim 11, and adds Charles to the basic combination with respect to claim 12. In addition, claims 14-21 stand finally rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Pett '178, Atkinson, Schmidt, Martin, and Charles.

Rather than reiterate the arguments of Appellant and the Examiner, reference is made to the Briefs[2] and Answer for their respective details.

OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the Examiner and the evidence of obviousness relied upon by the Examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, Appellant's arguments set forth in the Briefs

[2] The Appeal Brief was filed June 20, 2005. In response to the Examiner's Answer mailed September 9, 2005, a Reply Brief was filed November 8, 2005, which was acknowledged and entered by the Examiner as indicated in the communication dated January 11, 2006.

along with the Examiner's rationale in support of the rejection and arguments in rebuttal set forth in the Examiner's Answer.

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the invention as set forth in claims 1-25. Accordingly, we reverse.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966). The examiner must articulate reasons for the examiner's decision. In re Lee, 277 F.3d 1338, 1342, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002). In particular, the examiner must show that there is a teaching, motivation, or suggestion of a motivation to combine references relied on as evidence of obviousness. Id. at 1343. The examiner cannot simply reach conclusions based on the examiner's own understanding or experience – or on his or her assessment of what would be basic knowledge or common sense. Rather, the examiner must point to some concrete evidence in the record in support of these findings. In re Zurko, 258 F.3d 1379, 1386, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001). Thus the examiner must not only assure that the requisite findings are made, based on

Thus the examiner must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the examiner's conclusion. These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See Id.; In re Hedges, 783 F.2d 1038, 1040, 228 USPQ 685, 687 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976).

With respect to the Examiner's 35 U.S.C. § 103(a) rejection of independent claims 1, 14, 22, and 24, all of the appealed independent claims, Appellant asserts (Brief, pages 8-11; Reply Brief, pages 2-5) that the Examiner has failed to set forth a prima facie case of obviousness since proper motivation for the proposed combination of references has not been established. After reviewing the arguments of record from Appellant and the Examiner, we are in general agreement with Appellant's position as stated in the Briefs.

Initially, we note that each of the appealed independent claims 1, 14, 22, and 24 requires a bridgetap line adaptor in which the adaptor includes "a capacitor in parallel with one of another capacitor and a diode." In addressing this claim language, the Examiner proposes (Answer, page 4) to modify the bridgetap adaptor of Pett '178, which includes a capacitor (Pett '178, Figure 7), by adding a surge protecting parallel connected diode as taught by Atkinson to the capacitor in Pett '178. In our view, however, the home security system described by Atkinson has little relevance to the external digital signal line transmission system of Pett '178 and, at best, provides only a disclosure that power surge protecting parallel connected diodes are known in the art. The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783-84 (Fed. Cir. 1992).

Further, we find no disclosure in Pett '178 which indicates any concern with voltage surge protection, the stated rationale for the Examiner's proposed combination with Atkinson. Although the Examiner asserts (Answer, page 14) that the DSL line of Pett '178 would be as susceptible to voltage surges as the lines of Atkinson, and therefore equally in need of surge protection, we find no evidence on the record before us to support such a conclusion. It does not matter how strong the Examiner's convictions are that the claimed invention would have been obvious, or whether we

might have an intuitive belief that the claimed invention would have been obvious within the meaning of 35 U.S.C. § 103. Neither circumstance is a substitute for evidence lacking in the record before us. In our view, given the disparity of problems addressed by the applied prior art references, and the differing solutions proposed by them, any attempt to combine them in the manner proposed by the Examiner could only come from Appellant's own disclosure and not from any teaching or suggestion in the references themselves.

We are further of the view that even assuming, arguendo, that proper motivation existed for the ordinarily skilled artisan to add a surge protecting diode to the system of Pett '178, we find no support for the Examiner's conclusion that the resulting structure would necessarily satisfy the specific combination set forth in independent claims 1, 14, 22, and 24. In our opinion, any conclusion that an ordinarily skilled artisan would place a surge protecting diode across a capacitor of the bridge tap adaptor in Pett '178 could only be based on unwarranted speculation, particularly in view of the fact that Atkinson has no disclosure of the surge protecting diode 235 being in parallel connection with a capacitor.

We have also reviewed the Schmidt, Martin, and Charles references applied by the Examiner to address the various dimensional features set forth in several of the appealed claims. We find nothing, however, in the disclosures of the Schmidt, Martin, and Charles references which would overcome the innate deficiencies of the Pett '178 and Atkinson references, either individually or collectively, as discussed supra.

In view of the above discussion, since we are of the opinion that the proposed combination of references set forth by the Examiner does not support the obviousness rejection, we do not sustain the rejection of independent claims 1, 14, 22, and 24, nor of claims 2-13, 15-21, 23, and 25 dependent thereon.

In summary, we have not sustained the Examiner's rejections of any of the claims on appeal. Therefore, the decision of the Examiner rejecting claims 1-25 under 35 U.S.C. § 103(a) is reversed.

REVERSED

JOSEPH F. RUGGIERO
Administrative Patent Judge

LANCE LEONARD BARRY
Administrative Patent Judge

JEAN R. HOMERE
Administrative Patent Judge

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